

ĀNANDAJOTI BHIKKHU

AN OUTLINE OF THE METRES IN THE PĀLI CANON

Introduction

An understanding of the basic principles underlying Pāli metrical composition is not hard to acquire and will certainly enhance any reader's appreciation of the texts of Early Buddhism. Some of the most important and inspiring of these texts are written either wholly or mainly in verse, and even in the prose collections verse abounds. Below is a table giving estimates of the verse numbers in some of the most important collections in the *Sutta Piṭaka*, from which we can see that that collection alone contains well over 20,000 verses (numbers are based on the Pali Text Society [PTS] editions except where stated, and in some cases are approximate only):

<i>Dīghanikāya</i>	280+	
<i>Majjhimanikāya</i>	230+	
<i>Samyuttanikāya</i>	1000+	(945 in <i>Sagāthavagga</i>)
<i>Aṅguttaranikāya</i>	570+	
<i>Khuddhakapāṭha</i>	72	
<i>Dhammapada</i>	423	
<i>Udāna</i>	77	
<i>Itivuttaka</i>	263	
<i>Suttanipāta</i>	1149	

<i>Vimānavatthu</i>	1291 (Ce) ¹
<i>Petavatthu</i>	823 (Ce)
<i>Theragāthā</i>	1279
<i>Therīgāthā</i>	522
<i>Jātaka</i>	6905 (Ce)
<i>Apadāna</i>	5228 (Ce)
<i>Buddhavaṃsa</i>	960+
<i>Cariyapīṭaka</i>	372 (Ce)

In recent times much scholarly work in this field has been produced, so that it is now possible to outline the prosody of these texts with some degree of accuracy. However the difficulty the interested student faces at this point is that the studies that have been done are either too detailed for the beginner, or too narrow, being based on only one metre, or one type of metre.

This paper therefore is an attempt to summarise, within a relatively short compass, and hopefully in a fairly straightforward way, what is so far understood about Pāli verse composition during the canonical period. As such it relies very much on the work of previous scholars in this field such as SMITH, WARDER, and NORMAN², whose tables on usage have been consulted at every stage. However, I have also re-scanned a number of works wherever it seemed necessary to check descriptions and standardise terminology. I have also attempted to summarise the results of monographs written by ALSDORF, BOLLEE, BECHERT, and others.

In this paper I have preferred to use the Pāli names of the metres rather than their Sanskrit equivalents, as is the more common practice in recent works on the literature. Although verse composition in Pāli is intimately related to that of its cultural environment, it nevertheless represents a definite stage in the development of Indian verse compo-

¹ For the key to the abbreviations used in this paper please refer to the Abbreviations listed at the end of this paper.

² For the various works consulted in preparing this paper see the Bibliography at the end of this paper.

sition. It seems reasonable then, that if our intention is to describe the metres as they appear in the Pāli sources, that we should also designate them by their Pāli names, and understand from the outset that these metres differ somewhat from their usage in other, or later, cultural contexts.

At the time of the composition of these verses, of course, there was nothing like the Sanskrit hegemony in cultural matters that emerged after the canon was closed. In fact, it appears that in the period under discussion it was the vernacular cultures, of which Pāli forms a part, that were in the forefront of cultural evolution, adopting popular or folk forms into their compositions, which were still quite fluid in structure, and which were only later classified and organised by writers on Sanskrit aesthetics. However, for the convenience of the student, in preparing this paper I have provided Sanskrit equivalents for the metres (and occasionally other words) at relevant places in the paper, and these and others are also noted in the glossary.

This paper is divided into 4 sections: the first deals with the rules for scansion, and the exceptions that have to be taken into consideration; the second presents a description of the metres themselves; the third considers briefly the important subject of the mixing of metres; and the fourth an index and glossary, which provides definitions of all the most important terms used in the literature, and seeks to disentangle some of the confusion that exists in the terminology.

In the descriptions that follow these conventions are used:

- ∪ = short;
- — = long;
- ≍ = short or long;
- R = one long or two shorts;
- R̄ = one short or one long or two shorts;
- ∪—∪ = one short, one long & one short or two longs;
- ≍ ∪ ∪ = two shorts & one long or one long & two shorts.
- Sarabhatti vowels are normally written in superscript e.g. a^{ri}ya
- Resolution is indicated by double underlining thus:

- In the metrical markings above the verses the *pādayugas* (pairs of lines) are separated by a double vertical line thus: ||;
- A single vertical line | marks off the main structural segments within a line (the opening, the break, & the cadence)³.

Acknowledgements

The idea for this paper arose out of a talk I had with the English bhikkhu Ven. Paññānanda, in which we discussed the struggle we had both been through at the beginning of our studies owing to the lack of a simple, comprehensive guide to Pāli metrical composition. From the start Ven. Paññānanda has helped in this work by reading it through and making a number of corrections and suggestions for improvement which have helped to clarify the presentation.

Recently another monk, who wishes to remain anonymous, made a very careful review of this work and made many useful suggestions and corrections which have greatly enhanced the presentation of this paper. It should be noted that without the generosity of these monks this work would be so much the poorer.

ONE: SCANSION AND RELATED MATTERS

1.1 Scansion

In analysing Pāli verse a syllable is considered to be short or long metrically. Through the alternation of short and long syllables it is possible to build up rhythmic structures just as it is in music.

In order to define what is a short and what is a long syllable there are two sets of variables that have to be taken into consideration,

³ Note that sometimes in the literature on the subject segments and *pādayugas* are separated by the use of a comma.

which is whether the syllable is open or closed; and whether the vowel is short or long.

- 1) An open syllable is one in which a vowel is followed by another vowel, or by not more than one consonant; a closed syllable is one in which a vowel is followed by a conjunct, or by the niggahita (ṃ).
- 2) a, i, & u, are naturally short (rassa) vowels; ā, ī, & ū, are naturally long (dīgha) vowels. e & o are long in open syllables and short in closed syllables.

An open syllable with a short vowel is short metrically.

A closed syllable, or a syllable with a long vowel, is long metrically.

In analysis 2 signs are used to indicate length,

viz: ˘ = short; — = long.

We can represent the rules for scansion like this:

SYLLABLES

		open	closed
V	short		
	a i u	˘	—
O			
W	variable		
	e o	—	—
L			
S	long		
	ā ī ū	—	(—)

Here is a verse from *Maṅgalasutta* of *Khuddakapāṭha* (5: 1) together with its analysis:

1 2 3 4 5 6 7 8 || 1 2 3 4 5 6 7 8
 ˘ — — — ˘ — — — ˘ — — — ˘ — — —

a & b *Bahū devā manussā ca, ~ maṅgalāni acintayum,*

1 2 3 4 5 6 7 8 || 1 2 3 4 5 6 7 8
 — — ˘ — — — — — — — ˘ — ˘ — ˘ —

c & d *ākaṅkhamānā sotthānaṃ, ~ brūhi maṅgalam-uttamaṃ.*

In this verse all the principles outlined in the rule can be seen:

- 1) a short vowel followed by another vowel = ˘ , b 4
- 2) a short vowel followed by a single consonant = ˘ , a 1, 5; b 2, 5, 7; c 3; d 2, 4, 5, 7
- 3) a short vowel followed by a conjunct consonant = — , a 6; b 1, 6; c 2; d 3, 6
- 4) a short vowel followed by niggahīta = — , b 8; c 8; d 8
- 5) a variable vowel followed by a single consonant = — , a 3
- 6) a variable vowel followed by a conjunct consonant = — , c 6
- 7) a long vowel followed by a single consonant = — , a 2, 4, 7; b 3; c 1, 4, 5, 7; d 1

Because of the tendency in Pāli for all syllables to be no longer than 2 measures (˘ = 1 measure; — = 2 measures), a long vowel followed by a conjunct consonant is rare, and doesn't occur in our example. Note however that there are some words that do have a long vowel followed by a conjunct consonant, like *svākkhāta* & *brāhmaṇa*, and they do occur in verse, where they are counted as 2 morae as with a long vowel or a syllable containing a conjunct consonant.

1.2 Digraphs

Note that in presenting Pāli in Roman letters aspirates are indicated by digraphs (kh, gh, ch, jh, etc.) These are not to be taken as conjunct consonants, as they represent but a single sound, and are to be counted as single letters are elsewhere (indeed, in the Sinhalese, Burmese, Thai & Indian scripts they are normally represented by single letters).

1.3 Conventions

As stated above two signs are used to indicate syllabic length (or weight, which is both a more precise definition, and more in keeping with Indian terminology), they are:

- ◡ = short (lahu, lit: light)
- = long (garu, lit: heavy)

This is the convention that is normally used in Europe, and the one followed in this paper. However it should be noted that in Indian works on the subject just the opposite convention normally prevails (i.e. ◡ = long, — = short)! Therefore when consulting works on metre care must be exercised to find out which convention is being employed.

1.4 Exceptions

Occasionally we come across exceptions to the normal rules of scansion:

- 1) Some conjuncts do not make position (i.e. they fail to make the preceding syllable long as expected).
- 2) Occasionally partial vowels (*sarabhatti*) are written, but have to be ignored when scanning a verse.

1.5 Conjuncts not making position

The most common conjunct that does not make position is “br”, which regularly fails in this regard in the following words: “*brāhmaṇa*”, “*brahma-*”, “*brūti*” (and its present declension), & “*anubṛūhayē*”. This last is particularly interesting because elsewhere “br” regularly does make position medially.

Other words that sometimes fail to make position are “*tvam*”, “*dvāra*”, & “*nhātaka*”.

“by” (or, alternatively “vy”) quite often fails in this regard also. Other cases must remain doubtful.

1.6 Sarabhatti (svarabhakti), “broken”, or partial vowels

Some words contain partial vowels that normally have to be ignored when scanning a verse. They usually involve the separation of two semi-vowels; or of a semi-vowel from the aspirate, the nasal, or the sibilant. Some of the more common words containing *sarabhatti* are listed here (with the *sarabhatti* vowel in superscript):

arⁱya (normally to be scanned as (- ˘))

irⁱyati (- ˘ ˘)

carⁱya (- ˘)

virⁱya (- ˘)

ar^aha (- ˘)

kayⁱra (- ˘)

n^ahāta (- ˘), in this *nh* is counted as a double consonant, making the previous syllable long.

In illustration of *sarabhatti*, there is this verse from *Maṅgalasutta* (Khp 5: 10)⁴:

˘ ˘ ˘ | ˘ ˘ ˘ | ˘ ˘ ˘ | ˘ ˘ ˘ |
*Tapo ca brahmacarⁱyañ-ca, - arⁱyasaccāna’ dassanaṃ*⁵,
 ˘ ˘ ˘ | ˘ ˘ ˘ | ˘ ˘ ˘ | ˘ ˘ ˘ |
nibbānasacchikiriya ca - - etaṃ maṅgalaṃ-uttamaṃ.

Note that sometimes these vowels must be scanned as though they were indeed full vowels, and as it is not possible to discern any rule about this we must presume that it is due to metrical considerations (m.c. = *metri causa*).

⁴ For abbreviations of text titles see the Bibliography at the end of this paper.

⁵ For the loss of *niggahūta* m.c. in line b, see 1.11 below.

From the *Lakkhaṇasuttanta* (D. 30. 2. 9), a line in the *Rucirā* metre⁶ where *kariya* must be scanned as containing 3 syllables:

— — — | — — — — | — — — —

Sukhapphalaṃ kariya sukhāni vindati.

Occasionally we come across a line where the same vowel occurring in different positions must be scanned one time as *sarabhatti*, and the other as a full short vowel, as in *Dhp* 313:

— — — — | — — — — | — — — — | — — — —

Kay'rañ-ce kayirath' enaṃ ~ dalhaṃ enaṃ parakkame.

1.7 Fluidity

In verse composition it was always considered possible to use alternate forms of words according to the needs of the metre. For that reason we sometimes find unusual forms in verse e.g. *daṭṭhu* (for *disvā*), *ghātvā* (for *ghāyivā*). In the nominal inflection we sometimes find forms have alternative quantities e.g. in the masculine dative & genitive plural *-īnaṃ*, and the feminine ablative singular *-īto* etc. As these alternatives were available in the language, they were simply employed according to convenience.

1.8 Metrical licence

Besides these though, we also find many instances where words have been altered in certain ways in order to meet the needs of the metre, these can be summarised as follows:

- 1) Lengthening or shortening of vowels
- 2) Doubling or simplifying of consonants
- 3) Employing or dropping the *niggahīta*

⁶ For the parametres of this metre see 2.8 below.

It should be pointed out that these changes cannot occur arbitrarily, but only in certain positions in words, which we may summarise thus:

- 1) End syllables are the ones most likely to be changed
- 2) Medial syllables only change where there is junction (either between words in compound, or between stem and affix)
- 3) Rarely, initial syllables may be changed also.

1.9 Vowel changes

We quite often find in verse composition that the vowels -ā, -ī, and -ū, have been either lengthened or shortened m.c. End vowels are often subject to these changes, and end vowels in -ī in particular, indeed the lengthening of this vowel m.c. far exceeds all other cases. Occasionally vowels in medial position also undergo change, this being more common than the doubling or simplifying of consonants (which obtains the same result metrically).

The vowels e & o are variable in length, being normally long in open syllables (e.g. *upēkhā*), and short in closed syllables (e.g. *upēkkhā*). Occasionally in verse we find that these vowels must be scanned as short even in open syllables, and, as with the other vowels, this seems to occur particularly when they stand at the end of a word.

Example from *Ratanasutta* (Khp 6. 10f), where the last syllable in *abhabbo* must be scanned as short:

— — — | — — — | — — —

Cha chābhiñhānāni abhabbō kātuṃ

1.10 Consonant changes

Another way to change the length of a syllable is by doubling or simplifying consonants. When a conjunct consonant is simplified it leaves an open syllable, which, provided the vowel is short, is short metrically. When a single consonant is doubled it closes the previous syllable, which then has to be scanned as long metrically.

In the example from *Ratanasutta* quoted above we can see that the double consonant in *abhiṭṭhānāni* has been simplified to meet the requirements of the metre.

1.11 Niggahīta

As can be seen in 1.1 above, a short vowel followed by *niggahīta* is long metrically, while if it is followed by labial *m* (and then a vowel) it is short metrically. It seems that the retention of *niggahīta*, or the change to labial *m* before a vowel was somewhat fluid even in prose in the canon. In line with our discussion in 1.8 above these alternatives may be applied according to the needs of the metre. Occasionally in verse we find that *niggahīta* is dropped altogether from the end of a word so as to leave the last syllable open and short. Example from *Dhammapada* (vs 183d):

Etaṃ Buddhāna' sāsanaṃ (= Etaṃ Buddhānaṃ sāsanaṃ).

1.12 Verses that do not scan correctly

It may come as a surprise that when so many changes are considered to be permissible, quite often the expected change does not in fact take place, even in cases where it appears to be easy to do so, and the metre is simply left “wrong” according to the norms that otherwise prevail.

1.13 *Ti*, and the recitor's remarks

It should be noted here that the quotation marker “*ti*”, when it occurs at the end of a verse is normally considered as outside the metre (cases where it may need to be counted as inside the metre *metri causa* in order to make a line scan remain doubtful). Note however that *ti* and *iti* sometimes occur as an integral part of a verse, and the syllables are then counted as normal.

A similar phenomenon is the case of the so-called “recitor’s remarks” (e.g. “*iti Dhaniyo Gopo*”, Sn 1:2 vs 1 (vs 18), and see *GD II*, pg 137 for references), which are also outside the metre, and are presumed to have been added in by the recitor in order to clarify the context.

1.14 Syllabic equivalence

In Pāli metrics it is clear that an equivalence was felt in the relationship between short and long syllables, so that to all intents and purposes 2 shorts = 1 long (i.e. ∪∪ = –). This has given rise to two complimentary phenomena which may be seen in composition:

- 1) the resolution of one long (or presumed long) syllable into two shorts: – > ∪∪
- 2) the replacement of two short (or presumed short) syllables by one long one: ∪∪ > –

1.15 Resolution

The resolution of a long (or presumed long) syllable into two shorts is a common feature of verse composition. The first syllable of any line is particularly susceptible to this treatment, but resolution is found mid-line also.

It appears however that resolution is only allowed in regard to the first two syllables of a word (including words that appear as the second half of a compound, or after a prefix). An exception to this seems to exist in regard to the negative particle “na”, which sometimes forms the first half of a resolved syllable.

This “rule of resolution”, as we may call it, can help in identifying the underlying structure in lines of verse that are otherwise hypermetric (i.e. lines in which there are syllables additional to the normal metre), and we can thereby correctly identify the variation in a *Vatta* prior line, or the *gaṇa* structure in the bar metres (this will be

1st example from *Buddhavaṃsa Sumedhakathā* vs 46 (A *Vatta* verse (normally 8 syllables long) showing resolution of the 4th syllable in line c, resolution of the 6th in line e, and resolution of the 1st in line f):

c & d *Catūhi satasahasseehi – jalabhiññehi tādihi,* Pathyā

Further example from the *Vatthugāthā* to *Pārāyanvagga* (Sn 995), where it will be seen that resolution sometimes can occur twice within the same line:

1.16 Replacement

Example from *Pārāyanavagga* of *Suttanipāta*, (1068cd) (*Tuṭṭhubha* lines, normally 11 syllables to the line, the (presumed) short 6th & 7th vowels in both lines have been replaced by one long one):

--U--|,--|U--

Etaṃ viditvā saṅgo ti loke,

U--|,--|U--

bhavābhavāya mā kāsi taṇhaṇ-ti⁷.

TWO: DESCRIPTION OF THE METRES

2.1 The types of metre

Pāli metres can be divided into four main types according to their method of construction, in outline they are:

- 1) Syllabic metres, e.g. *Vatta*, *Tuṭṭhubha*, *Jagatī*
- 2) Measure metres, e.g. *Vetālīya*, *Opacchandasaka*, *Vegavatī*
- 3) Bar metres, e.g. *Gīti*, *Ariyā*, *Gubbinī*
- 4) Fixed metres, e.g. *Upajāti*, *Rathoddhatā*, *Uggatā*

In most metres a verse (*gāthā*) is made up of 4 lines (*pāda*), though sometimes we find verses with 6 lines, or more rarely 5.

The metres are constructed according to the amount of syllables or measures there are in the line, and the patterns that are made through the alternation of the short and long syllables.

In the syllabic metres it is the number of syllables that make up a line that is the organizing principle, e.g. *Vatta* has 8 syllables to the line, *Tuṭṭhubha* 11, & *Jagatī* 12 (the various patterns that occur in these metres are discussed in the descriptions that follow).

In the measure metres the syllables may vary, but the total amount of measures should remain fixed (U = 1 measure, = – 2 measures), e.g. *Vetālīya* has a *mattā* count of 14 in the 1st & 3rd lines, and 16 in the 2nd & 4th; *Opacchandasaka* 16 in the 1st & 3rd, 18 in the

⁷ Note that the quotation marker at the end of the line is outside of the metre, as discussed in 1.13 above.

2nd & 4th; *Vegavatī* has the same *mattā* count as *Vetālīya*, but the syllabic pattern is different.

In the bar metres a secondary organising principle is employed over and above that of counting the measures, which is to organize the syllables into bars, normally of 4 measures to the bar.

In the fixed metres virtually all of the syllables in the lines are of fixed quantity, with normally only the end syllable being variable.

After this brief outline of the different structural principles involved we can examine the metres in more depth.

2.2 The syllabic metres, akkharacchandās type 1 (akṣaracchandās)

In these the line length is determined by the number of syllables there are in a line, e.g. *Vatta* normally has 8; *Tuṭṭhubha* 11; *Jagatī* 12. These metres have more or less fixed cadences (i.e. the closing rhythm of a line), but allow a greater freedom in the rest of the line, in which they differ from *akkharacchandās* type 2. The syllabic metres are the most common type found in the canon.

2.3 Vatta [Vaktra, aka Śloka (=Siloka)]

The most important and prevalent metre in canonical Pāli is the *Vatta*, which has a great deal of flexibility, and seems to be equally well adapted to aphorism, question & answer, narrative, and epic.

A *Vatta* verse normally consists of 4 lines with 8 syllables to the line, organised in dissimilar pairs which are repeated to make up a verse (note that owing to resolution sometimes a *Vatta* line may contain 9 syllables).

Here is an analysis of the *pathyā* (normal) structure of the *Vatta*:

	1	2	3	4	5	6	7	8
Odd line:	⌘	⌘	⌘	⌘	⌘	⌘	⌘	⌘

1 2 3 4 5 6 7 8

Even line: ॐ ॐ ॐ ॐ ॐ ॐ ॐ ॐ x2

In the 2nd & 3rd positions two successive shorts are normally avoided, as we can see through occasional changes of syllabic length in words that occur in these positions.

2.4 Variations

The cadence at the end of the even lines ॐ ॐ ॐ is very well established and normally adhered to, but occasionally other patterns show up in this position, and we should perhaps take them as acceptable, even if extraordinary, variations, they are: ॐ ॐ ॐ and ॐ ॐ ॐ, others are doubtful.

In the odd lines 7 variations (*vipulā*) occur, besides the normal structure, they are:

	1	2	3	4	5	6	7	8	
<i>Anuṭṭhubha</i>	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	<i>javipulā</i>
<i>1st vipulā</i>	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	<i>navipulā</i>
<i>2nd vipulā</i>	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	<i>bhavipulā</i>
<i>3rd vipulā</i>	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	<i>mavipulā</i>
<i>4th vipulā</i>	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	<i>ravipulā</i>
<i>5th vipulā</i>	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	<i>savipulā</i>
<i>6th vipulā</i>	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	ॐ	<i>tavipulā</i> (sporadic)

There is normally a *caesura* (word break) after the fifth syllable in the 3rd *vipulā*, and after the fourth syllable in the 4th *vipulā*.

Occasionally other patterns show up in the opening of the first three *vipulās* such as ॐ ॐ ॐ, but only rarely. As can be seen in the descriptions above resolution of the first syllable is quite common and acceptable. The 6th & 4th are occasionally resolved, and apparently the 3rd, 5th, & 7th can be also, but not the 2nd or the 8th. By applying

the rule of resolution described in 1.15 above, it is possible to help identify the underlying structure of a *vipulā*, take the case of an odd line showing the following structure:

— — — — —

if the caesura (word break) occurs after the fourth syllable, the *vipulā* is the 4th:

— — — — —

if the caesura occurs after the 5th syllable, it is *pathyā*:

— — — — —

2.5 Vatta periods

The *Vatta* metre in the canon can be divided roughly into two periods, the early and the late, according to whether the *Anuṭṭhubha* variation occurs in the prior lines, or whether it is normally avoided. In the early period the *pathyā* accounts for about 60% or more of the prior lines, and the *Anuṭṭhubha* at that time is the most important variation accounting for about 15%. As the metre comes closer to its classical form in the later part of the canon the *Anuṭṭhubha* occurs only sporadically, and the *pathyā* greatly predominates, sometimes accounting for as much as 85% of all the lines.

An interesting comparison is afforded between the early *Vatta* of the questions and answers in *Pārāyanavagga* of *Suttanipāta*, and the late *Vatta* of the Introductory Verses (*Vatthugāthā*). We may note here that in *Hemakamāṇavāpucchā* (Sn V:8) (vs 1084 ff) we may have a case of the *Anuṭṭhubha* being used as an independent metre in the canon, but as it is only 4 vs long it is too short to be sure.

2.6 Tuṭṭhubha (Triṣṭubh), & Jagatī

Tuṭṭhubha in the canon occurs in basically three forms. In the early period *Tuṭṭhubha* verses are used in the main independently. Only occasionally do we find *Jagatī* lines in the early verses, and then

only as an expedient, as it were⁸. Later in the middle period we find that these two metres are frequently intermixed in composition, and at that point we might better describe the metre as being *Tuṭṭhubha-jagatī*. Later still these metres are replaced by their classical counterparts-*Upajāti* and *Vamśaṭṭhā* (described in 2.8 below).

As the variations that occur in the one also occur in the other, we can describe the two metres together.

Tuṭṭhubha normally has 11 syllables to the line, and is defined thus:

1	2	3	4	5	6	7	8	9	10	11	
𑖀	—	𑖄	—	𑖄	𑖄	𑖄	—	𑖄	—	𑖄	x4

Jagatī is similar, but has an extra short syllable in penultimate position, giving a line of 12 syllables, thus:

1	2	3	4	5	6	7	8	9	10	11	12	
𑖀	—	𑖄	—	𑖄	𑖄	𑖄	—	𑖄	—	𑖄	𑖄	x4

2.7 Variations

The normal opening in both metres is described as being 𑖄—𑖄—, but there are a significant number of occasions when variations are seen (especially in the early period), the most common being 𑖄— — —, but also we come across 𑖄—𑖄—, 𑖄𑖄— — & —𑖄— —. Others occur only very rarely.

In the break (syllables 5-7) the pattern—𑖄— prevails (85% approx), with resolution occasionally giving, 𑖄𑖄—𑖄—. Other patterns that occur in this position are 𑖄𑖄—, —𑖄—, & 𑖄𑖄— —. Rarely we also find the pat-

⁸ The last two sections of *Suttanipāṭa* are considered to contain some of the earliest texts in the canon. And in the first of these sections, *Aṭṭhakavagga* (Sn IV), there are only 4 *Jagatī* lines among nearly 400 lines of *Tuṭṭhubha* (there is also one *Jagatī* verse, no 836). In *Pārāyanavagga* (Sn V), the *Jagatī* lines amount to approx 7% of the lines in the *Tuṭṭhubha* verses.

terns $-\cup$ and $\cup-$, so that the 6th syllable, though normally short, may occasionally be long.

Sometimes an extended form is produced by resolution at the first syllable, which then gives a line of 12 (13) syllables - note that the pattern of the cadence will help identify the metre in these cases.

Another extended form may be produced by a line having a *caesura* at the 5th syllable, and restarting from the same syllable, giving the line:

5 & 5

$\cup - \cup - | - , \cup \cup | - \cup - (\cup) \cup$

Occasionally replacement takes place, whereby two short syllables are presumed in the 6th & 7th positions, and replaced by one long one. The line then has one syllable less than expected. (see 1: 16 above for an example):

6&7

$\cup - \cup - | - - | - \cup - (\cup) \cup$

Examples: early *Tuṭṭhubha*, *Khaggavisāṇasutta* Sn I:3; the “*Aṭṭhaka*” *suttas* Sn IV:2-5; and the *Tuṭṭhubha* verses in *Pārāyanavagga* Sn V. The second of the extended forms described above is used extensively in the *Vatthugāthā* to *Nālakasutta* Sn III:11 (vs 679ff). Late *Tuṭṭhubha* tends to conform to the fixed patterns that emerged during this time and which are described below.

2.8 Upajāti, Vaṃsaṭṭhā (Vaṃśasthā), and Rucirā

These are the fixed metres in the canon that have been derived from *Tuṭṭhubha* and *Jagatī*, their profile looks like this:

i) *Upajāti* (from *Tuṭṭhubha*):

1	2	3	4	5	6	7	8	9	10	11			
\cup	-	\cup	-		-	\cup	\cup		-	\cup	-	\cup	x4

ii) *Vaṃsaṭṭhā* (from *Jagatī*):

1	2	3	4	5	6	7	8	9	10	11	12	
⌞	—	⌞	—		—	⌞	⌞		—	⌞	—	⌞
												x4

As can be seen these are the “normal” forms of their respective metres, but now allowing only little flexibility.

iii) *Rucirā* (from *Jagatī*, with resolution of the 5th syllable, giving a 13 syllable line):

1	2	3	4	5	6	7	8	9	10	11	12	13
⌞	—	⌞	—		⌞	⌞	⌞	⌞		—	⌞	—
												⌞
												x4

Examples: *Upajāti* and *Vaṃsaṭṭhā* are used to great effect, both mixed and independently in *Tālaputta's gāthās* Th 1091-1145. *Vaṃsaṭṭhā* and *Rucirā* both appear as independent metres in *Lakkhaṇasuttanta* DN.30 (see 2.24).

2.9 The measure metres, *mattāchandas* (mātrācchandas)

These metres have a different method of organising the line: not by counting the syllables, but according to the total number of measures (*mattā*) there are in a line. In these metres a short syllable is counted as one measure, and a long one as two, and it is therefore possible to determine the exact amount of measures there are in a line. When this is done of course the syllabic length will vary.

What distinguishes the various metres that exist in this class is two things: the number of measures, and the pattern of the cadence. The openings are variable, but come in groups of 2 *mattās*. The odd line having 3 such groups (i.e. ⌞⌞⌞), the even 4 (i.e. ⌞⌞⌞⌞). The most common forms are outlined below.

Note that a syllable at the end of the line is normally counted as two *mattā* whether it is long or not, a short syllable counted in this way is called *pādanagaru*.

2.10 Vetāliya (Vaitāliya) and Opacchandasaka (Aupacchandasaka)

The first of these metres, *Vetāliya*, has 14 measures in the odd lines, and 16 in the even, with the cadence at the end of each line being $- \cup - \cup \underline{\cup}$.

Opacchandasaka, the second of the metres, has 16 measures in the odd lines, and 18 in the even. The cadence is similar to *Vetāliya*, but with an extra long syllable in penultimate position $- \cup - \cup - \underline{\cup}$.

The most common forms of the odd lines are:

$- \quad - \quad \cup \quad \cup \quad | \quad - \quad \cup \quad - \quad \cup \quad (-) \quad \underline{\cup}$
 $\cup \quad \cup \quad - \quad \cup \quad \cup \quad | \quad - \quad \cup \quad - \quad \cup \quad (-) \quad \underline{\cup}$
 $- \quad \cup \quad \cup \quad - \quad | \quad - \quad \cup \quad - \quad \cup \quad (-) \quad \underline{\cup}$

The most common forms of the even lines:

$- \quad - \quad - \quad \cup \quad \cup \quad | \quad - \quad \cup \quad - \quad \cup \quad (-) \quad \underline{\cup}$
 $\cup \quad \cup \quad - \quad - \quad \cup \quad \cup \quad | \quad - \quad \cup \quad - \quad \cup \quad (-) \quad \underline{\cup}$
 $- \quad \cup \quad \cup \quad - \quad \cup \quad \cup \quad | \quad - \quad \cup \quad - \quad \cup \quad (-) \quad \underline{\cup}$

with occasional resolution of a long syllable giving rise to other patterns in the opening. Through syncopation of syllables in adjacent groups we occasionally find different patterns in the opening of the prior lines, so that sometimes:

$- \quad - \quad \cup \quad \cup \quad > \quad - \quad \cup \quad - \quad \cup$
 $\cup \quad \cup \quad - \quad \cup \quad \cup \quad > \quad \cup \quad - \quad \cup \quad \cup \quad \cup$
 $\cup \quad \cup \quad - \quad - \quad > \quad \cup \quad - \quad \cup \quad - \quad \text{etc.}$

Occasionally we find a short syllable at the beginning of the line, which must be counted as long in order to complete the *mattā* count (this we may call *pādādigaru*, in compliment to *pāđantagaru*).

Examples: *Vetāliya*, Dhṛp 15-18, 235-238; *Subhā Jīvakambavanikā's gāthās* Thī 367-399; *Jarāsutta* Sn IV:6

Opacchandasaka, *Uragasutta* Sn I:1; *Cundasutta* Sn 1:5; *Kātiyāna's gāthās* Th 411- 416.

2.11 Mattāchandas Periods

It should be noted that in the early texts the most common opening of the odd lines in *Vetālīya* is — — — —. In the later period this falls back considerably with the other variations, notably — — — — — showing a marked increase, also in the later period the syncopated forms almost come to an end, and runs of short syllables start to appear.

2.12 Rathoddhatā and Pupphitaggā (Puṣpitāgrā)

These are the two fixed metres derived from the above.

Rathoddhatā (a *Vetālīya* even *pāda*):

— — — — — — — — — — x4

Similarly *Pupphitaggā* (from *Opacchandāsaka*) in the canon is still somewhat flexible:

— — — — — — — — — —
— — — — — — — — — — x2

with occasional resolution of a long syllable elsewhere. In its post-canonical form the opening of the first line was fixed as — — — — — and the second as — — — — —.

Note that in both of these metres the fixed forms have unusual variations in the openings, the latter especially showing the classical period's fondness for runs of short syllables.

Examples: *Rathoddhatā*, early: *Gotama's gāthās* Th 258-260; *Ambapālī's gāthās* Thī 252-270; late: *Kuṇāla-jātaka* Ja 536.

Both metres are used independently in *Lakkhaṇasuttanta* D.30.

2.13 Vegavatī

This metre has 14 measures in the odd lines, and 16 in the even, as with *Vetālīya*, but with a different cadence: — ∪ ∪ — ∪ .

In the canon the most common forms of the odd lines:

∪ ∪ — ∪ ∪ | — ∪ ∪ — ∪
— — ∪ ∪ | — ∪ ∪ — ∪

the even lines:

— ∪ ∪ — — | — ∪ ∪ — ∪
— ∪ ∪ — ∪ ∪ | — ∪ ∪ — ∪

we sometimes find syncopation producing different patterns in the opening of these lines.

When it attains to its classical form, it is restricted to:

∪ ∪ — ∪ ∪ | — ∪ ∪ — ∪
— ∪ ∪ — ∪ ∪ | — ∪ ∪ — ∪ x2

Examples: *Kokāliyasutta* (pt.) Sn III:10; *Vaṅgīsa's gāthās* (pt.) Th 1214 - 1222, the latter *gāthās* being mixed with *Vetālīya*.

2.14 Svāgatā

In the canon this metre has two dissimilar lines repeated to make up a verse, and the structure was still quite fluid:

Svāgatā odd lines:

— ∪ — ∪ | — — ∞ ∪
— ∪ ∪ — | — — ∞ ∪

Svāgatā even lines:

— ∪ — ∪ — | — ∞ — ∪
— ∪ ∪ — — | — ∞ — ∪

Note how close this is to *Vegavatī* at this stage. In the later period however the even line is fixed and repeated four times, so that the structure is then defined as:

— ∪ — ∪ ∞ | — ∪ ∪ — ∪ x4

Examples: early, *Mahāsamayasuttanta* DN. 20 vs 3;
late: *Jātakanidānakathā* vs 291.

2.15 The bar metres (*gaṇacchandās*)

Once a measure count was established, it was not long before a second structural principle was introduced, which was to organise the lines into bars, or *gaṇas*, normally having 4 measures to the bar, which may therefore take one of the following forms:

-- or ◡--◡ or ◡◡-- or--◡◡ or ◡◡◡◡

The rhythm of these metres is defined by the alternation of two rhythmic structures:

◡-- | ◡◡◡

In the descriptions that follow it should be borne in mind that resolution of a long syllable was always deemed acceptable, which means that any of the first three alternatives outlined above may appear as ◡◡◡◡. By applying the rule of resolution discussed in 1.15 above it is possible to help identify the underlying structure, thus: ◡,◡◡◡ = ◡--◡ with resolution; ◡,◡◡◡◡ = --◡◡ ; ◡◡,◡◡ = ◡◡--. (Of course there would have to be double resolution for it to equal --).

2.16 Old Gīti

This appears to be the earliest of the bar metres, and indeed, is most probably a transitional metre between *mattācchandās* and *gaṇacchandās* metres. There are two structures to the metre: the first is the normal form; the second is an extended form, which after the word break, restarts with a full *gaṇa*, thus:

Normal structure:

1	2	3	4
◡	--	◡	--
◡	--	◡	--
◡	--	◡	--

5 6 7 8
 — — — — — — — — x2

Extended structure:

1 2 3 4
 — — — — — — — —
 5 6 7 8
 — — — — — — — — x2

In the 2nd, 4th, and 6th *gaṇas* the pattern — sometimes occurs, but — is very rare. The opening *gaṇa* quite frequently looks like this: — ; in this case we have to count the initial syllable as long (*pādādigaru*) to make up the *mattā* count (cf 2.10 above). In the normal form we sometimes find that the 4th *gaṇa* looks like this: — ; in this case we have to count the short syllable, which occurs at the end of the first half of the *pādayuga* as long (*pādantagaru*). With the extended form cf. the extended *Tuṭṭhubha*, 2.7 above.

Examples: *Mettasutta* Khp 9; *Tivāṭakasutta* Sn IV:14; *Vaṅḡsa's gāthās* (pt) Th 1242-1245; *Upālisutta* MN:56

2.17 Gīti, Ariyā (Āryā), and their derivatives

In the *gaṇacchandās* metres in the Pāli canon, there are two structures to the *pādayuga* (pair of lines), they are:

Gaṇacchandās 1st *pādayuga*:

1 2 3 4 5 6 7 8
 — — — — — — — —

Gaṇacchandās 2nd *pādayuga*:

1 2 3 4 5 6 7 8
 — — — — — — — —

Resolution occasionally produces different patterns e.g. — — — — —

Replacement sometimes produces different patterns e.g. — — — — —

Note that — is very rarely found in any *gaṇa*.

The only difference between the two *pādayugas* lies in the 6th *gaṇa*.

Ariyā, which is the most common metre in this class, has the first *pādayuga* described above followed by the second, this gives a *mattā* count of 30 + 27.

Examples: *Isidāsī's gāthās* Thī 400 - 447, and *Sumedhā's gāthās* Thī 448 -522.

The next three metres are much less common:

Gīti has the first *pādayuga* repeated to make up a verse, *mattā* = 30 + 30.

Example: *Paripunṇaka's gāthā* Th 91.

Uggīti has the second *pādayuga* followed by the first, *mattā* = 27 + 30.

Example: the last of *Vijitasena's gāthās* Th 359.

Upagīti has the second line repeated, *mattā* = 27 + 27.

Example: *Gotama's gāthās* 587, 588, & 591, the latter being mixed with *Vatta*.

Other *gaṇacchandās* variations, including *pādayugas* with a full last *gaṇa* (giving a *mattā* count of 32), are apparently not found in the canon.

2.18 Jagāṇa (*amphibrachys*)

In these metres the *gaṇa* pattern ◡ — ◡ is normally found only in the even *gaṇas*, and occurs in roughly half of the 2nd & 4th *gaṇas*, and virtually always in the 6th (where appropriate), so that its inclusion there appears to be the rule.

2.19 Hypermetres, *Veḍha* & *Gubbini*

Only two examples of *gaṇacchandās* hypermetre have been found in the canon so far, they are *Veḍha* and *Gubbini*. The structure of both is similar and can be defined as follows:

Opening: ˘—˘ | ˘˘˘ | ˘—˘

Middle: ˘˘ | ˘—˘

End: ˘˘ | ˘—˘ | —˘

The middle *gaṇas* can be repeated a flexible number of times. The end normally finishes with a full *gaṇa* as described above but may finish with a half *gaṇa* ˘. Note that in these metres the pattern ˘—˘ is supposed to occur only in the odd *gaṇas* (in contradistinction to the *Ariyā* class of metres).

The *Veḍha* metre is normally composed of descriptive compounds (*varṇakas*) of varying length. The only examples discovered so far are in the *Kuṇāla-jātaka* Ja 536. Sometimes there are only four *gaṇas* in the compound, then the structure looks like this:

˘˘ | ˘—˘ | ˘˘ | —˘

but the text of these compounds now is very corrupt, and they sometimes have only three *gaṇas* (lacking the first).

Gubbini has the same structure, but need not consist solely of compounds. The only known example is the frequently repeated praise of the Three Treasures beginning “*Iti pi so...*”

2.20 *The fixed metres: akkharacchandas type 2 (akṣaracchandas) aka vutta (vṛtta).*

These metres can be divided into 3 kinds according to their verse structure:

- 1) *Samavutta*, have the same line repeated four times.
- 2) *Aḍḍhasamavutta*, have two dissimilar lines repeated.
- 3) *Viśamavutta*, have four dissimilar lines.

2.21 *Samavutta (Samavṛtta)*

The more popular of these fixed metres, *Upajāti*, *Vaṃsaṭṭhā*, *Rucirā*, *Rathoddhatā*, and *Svāgatā* have been described in 2.8 2.12 & 2.14 above.

Pamitakkharā (from *gaṇacchandas*):

1

Upaṭṭhitā:

Dodhaka (a *Vegavatī* even line repeated):

Other Metres: there are 3 others have not been named:

Vegavatī, which in its classical form belongs to this class, has been described in 15 above. *Pupphitagā* was described in 2.12.

⁹ This is WARDER's reference, given on page 221 of *Pāli Metre*, I have been unable to trace it.

2.23 Visamavutta (Visamavṛtta)

In *Lakkhaṇasuttanta* DN. 30 we find two metres belonging to this class, which has four dissimilar lines to the verse. The first is derived from *mattāchandas*:

Upaṭṭhitappacupita:

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
४	—	—	५	५	—	५	—	५	—	५	५	—	५	
४	—	४	५	५	—	५	—	५	—	५				
५	५	५	५	५	५	५	५	५						
५	५	५	५	५	५	५	५	५	५	—	५	५	—	५

There are normally word-breaks after the 8th syllable in the 1st line; 5th syllable in the 3rd line; and 7th syllable in the 4th line.

Example *Lakkhaṇasuttanta* (D. 30. 1. 30).

Uggatā (from gaṇacchandas):

1	2	3	4	5	6	7	8	9	10	11	12	13
५	५	—	५	—	५	५	५	—	५			
५	५	५	५	५	—	५	—	५	५			
४	५	४	५	५	५	—	५	५	५			
५	५	—	५	—	५	५	५	—	५	—	५	५

Example *Lakkhaṇasuttanta* (D. 30. 2.12).

2.24 Lakkhaṇasuttanta DN 30

As can be seen from the references supplied to the fixed metres above, the late *Lakkhaṇasuttanta* of the *Dīghanikāya* supplies us with a number of metres which are either rare or not otherwise found in canonical Pāli. For easy reference the metres are listed below, giving the *bhāṇavāra* and paragraph number of the PTS edition in brackets:

- 1 (1.6) *Vaṃsaṭṭhā* 5 vs
- 2 (1.9) *Vaṃsaṭṭhā* 6 vs

3	(1.12)	<i>Pupphitagga</i> 4 vs	
4	(1.15)	<i>Rathoddhatā</i> 3 vs	
5	(1.18)	<i>Pupphitagga</i> 4 vs	
6	(1.21)	<i>Rathoddhatā</i> 5 vs	(total 8 vs)
7	(1.24)	<i>Vamsaṭṭhā</i> 4 vs	
8	(1.27)	<i>Vamsaṭṭhā</i> 4 vs	
9	(1.30)	<i>Upaṭṭhitappacupita</i> 4 vs	
10	(1.33)	<i>Vamsaṭṭhā</i> 4 vs	
11	(2.3)	<i>Pupphitagga</i> 4 vs	(total 12 vs)
12	(2.6)	<i>Vamsaṭṭhā</i> 4 vs	
13	(2.9)	<i>Rucirā</i> 3 vs	
14	(2.12)	<i>Uggatā</i> 4 vs	
15	(2.15)	<i>Pamitakkharā</i> 4 vs	
16	(2.18)	<i>Vamsaṭṭhā</i> 4 vs	(total 31 vs)
17	(2.21)	<i>Pamitakkharā</i> 4 vs	
18	(2.24)	<i>Pamitakkharā</i> 4 vs	(total 12 vs)
19	(2.27)	<i>Upaṭṭhitappacupita</i> 4 vs	
20	(2.31)	<i>Upaṭṭhitappacupita</i> 7 vs	(total 15 vs)

THREE: THE MIXING OF METRES

3.1 Introduction

As we have seen from the description of the metres presented above, one of the main features of Pāli verse composition in the canon is its flexibility. Even the fixed classical metres which were just beginning to emerge towards the end of this period were somewhat fluid in structure, and there was still some room within which composition could take place.

Another way in which this shows itself is in the flexibility allowed to move between metres as and when required. This is evident both in the freedom with which different metres may be employed within a composition, and even the allowance to change metres within the verse itself, if that proved to be convenient for expression.

In what follows we will be concerned with what may be considered the more extreme case of metre mixing within the limits of a verse, but this will also serve to provide examples of the ability to move between metres in the composition as a whole.

3.2 *Tuṭṭhubha, Jagatī and their derivatives*

We saw in 2.6 above that although both *Tuṭṭhubha* and *Jagatī* exist as independent metres in their own right, and are used as such frequently, nevertheless the metres are commonly mixed, as a line in *Jagatī* metre was always considered acceptable in what is otherwise a *Tuṭṭhubha* verse (and visa versa). For a good example of this see *Ratanasutta* Sn II:1.

This characteristic continues even when the metres have achieved their fixed forms as *Upajāti* and *Vaṃsatṭhā*, as can be seen e.g. in *Tālaputta's* gāthās Th 1091-1145, where the metres are used both independently and in combination.

Rarely we find *Tuṭṭhubha* mixed with *Mattāchandas* lines. Examples: Sn 1:2 vs 18, 19; Ud II:6

3.3 *Vetāliya, Opacchandasaka, & Vegavatī*

These metres, being built around the same structural principle, are quite frequently mixed, though with the first two it seems that the rule is that *Vetāliya* should appear in the odd lines, and *Opacchandasaka* in the even (though there may be one or two counter-examples to this cf. Dhṛp 344 & Sn 527). With *Vetāliya* and *Vegavatī* there appears to be no particular rule about line order, perhaps because their *mattā* count is the same.

Examples: *Vetāliya & Opacchandasaka* - *Dhaniyasutta* Sn I:2; *Sabhiyasutta* Sn III:6 (pt: 510-540); *Vetāliya & Vegavatī* from *Vaṅṅīsa's* gāthās Th 1214-1222.

3.4 Vatta and other metres

So far we have mainly been considering the mixing of metres that employ similar structural principles, and that may account for the ease with which it was felt to be possible to move between the metres. However, when we come to *Vatta*, we have a syllabic metre with an *aḍḍhasamavutta* structure. None of the other metres have this particular combination of characteristics of course, but still we frequently find *Vatta* lines appearing alongside other metres, perhaps because it was by far the most common and familiar of the metres employed.

Normally the situation appears to be that account has been taken of the structure of the *Vatta* in mixing, and we usually find *Vatta* odd and even lines appearing in their expected positions in the verse. Below we will see that various combinations can be illustrated:

Vatta & Tuṭṭhubha

Sn 1061 = T, ab - V, cd

Dhp 330 = V, ab - T, cd

Sn 995 = T, abd - V, ef (*Jagatī*, c)

Sn 1055 = V, a - T, bcd

Sn 423 = V, abd - T, c

Sn 482 = T, abc - V, d

Th 1253 = T, a - V, bcd etc.

Vatta & Jagatī

Th 306 = V, ab - J, cd

Th 1089 = V, abc - J, def

Vatta & Mattāchandas

Th 1 = Op, acd - V, b

Th 551 = V, a - Vet, bcd

Th 1004 = Veg, ab - Vet, c - V, d!

Vatta & Gaṇacchandas

Vatta lines appear in *gaṇacchandas* verses a surprising number of times. It seems to be the rule that when the two metres share a *pādayuga*, *Vatta* takes the odd line. *Gotama's gāthās* Th 587-596 provide a good example of the mixing of *Vatta* lines in what are otherwise *gaṇacchandas* verses.

Conclusion

This then concludes our outline of the metres in the Pāli canon and their usage, but that is far from the end of the work that remains to be done in this field. We still do not have comprehensive analyses of all the metrical texts, particularly in regard to the later compositions like Vv, Pv, Ap, Bv, & Cp. And upto now we know very little about Pāli verse composition in post-canonical times, where we can find a whole library of works composed in verse according to classical norms. These include the various Chronicles pertaining to the history of the *Sāsana*; the verse Summaries of the *Vinaya*, *Dhamma*, & *Abhidhamma* composed by Ven. Buddhadatta and others; and the late medieval lives of the Buddha, composed in a mixture of ornate metres.

The student who is interested in the Pāli language and its development can be assured therefore that there is still much yet to discover and contribute in this area, and there is still much room for original research to be carried out in the area of Pāli metrical composition.

FOUR: INDEX AND GLOSSARY (Roman order of letters)

aḍḍhasamavutta (*ardhasamavṛtta*)

a metre having two dissimilar lines repeated to make up a verse e.g. *Vatta*, *Veṭālīya*, see also 2.20ff

akḥharacchandas (*akṣaracchandas*), syllabic metres

there are two types:

- 1) the flexible syllabic metres e.g. *Vatta*, *Tuṭṭhubha*, in which the syllabic patterns are still somewhat variable, see 2.1ff
- 2) the fixed syllabic metres, in which all, or nearly all, of the syllables are of fixed quantity e.g. *Vaṃsaṭṭhā*, *Uggatā*, see 2.20ff

anacrusis

one or two extra syllables at the beginning of a line, before the metre proper begins.

***anceps* ∼**

indicates that the syllable may be long or short in the stated position. In the Pāli canonical period the last syllable in a line is nearly always considered to be *anceps*, and sometimes the first syllable too, see *pādādigaru* & *pādantagaru*.

***Anuṭṭhubha* (*Anuṣṭubh*), see 2.3ff**

- 1) this is a Vedic metre originally having a *samavutta* structure

◡◡◡◡◡◡—◡◡ x4.

Over time variations from this basic pattern started to emerge, which eventually gave rise to a new metre having two dissimilar lines, the *Vatta*. As this was a gradual evolution at which point we should declare the metre to have gone over from *Anuṭṭhubha* to *Vatta* is a moot point. But the general position is that in the Pāli canonical period we find that we are dealing with the new metre, which has an *aḍḍhasamavutta* structure.

- 2) The name is also used when describing a variation that occurs in the odd lines of *Vatta* metre, which shows the same structure as the line illustrated above, and which is therefore the same as the *Vatta* even line.
- 3) Sometimes used as generic name applied to any metre having 8 syllables to the line.

anusvara*, see *niggahīta

***Aparavatta* (*Aparavaktra*) 2.22**

***Ariyā* (Āryā) 2.17**

- 1) a *gaṇacchandās* metre having two dissimilar lines with a *mattā* count of 30 + 27
- 2) sometimes the name is used more loosely to refer to any *gaṇacchandās* metre.

assimilation

euphonic change whereby one consonant takes the form of another which follows or precedes it e.g. *ud* + *ghāta* > *ugghāta*

br, see 1.5

Brahaṭī, generic name for metres having 9 syllables to the line

bar metres, see *gaṇacchandās*

break

the middle part of the *Tuṭṭhubha* and other similar metres, see 2.6ff

cadence

the closing rhythm of a line, or pair of lines

caesura, see *yati*

catalectic

having an incomplete number of syllables or *mattā* (opp: acatalectic, complete).

chandās

- 1) metre
- 2) sometimes is used loosely to indicate merely the number of syllables in a line

cheda, pause, see also *yati*

closed syllable see 1.1

conjunct consonants

two (or more) consonants which are not separated by a vowel e.g. *tt* in *mettā*, *ndr* in *indriya*

contraction

change from original two short vowels (usually separated by a semivowel) to one long one e.g. *aya* > *e*, *ava* > *o*. This sometimes makes sense of otherwise metrically “wrong” verses.

Dodhaka 2.21***dīgha* (*dīrgha*)**

used to refer to a naturally long vowel (not to be confused with *garu* which refers to metrical length)

digraphs

two letters that indicate but one sound, see 1.2

elision

the loss of a syllable, or part of a syllable, at the beginning or end of a word (which sometimes happens m.c.)

epenthesis

the insertion of a vowel between two consonants for euphonic reasons, see *sarabhatti*

euphony

ease of pronunciation, see also *sandhi*

even line = posterior line = the second line in a *pādayuga*

fixed metre

akkharacchandās type 2, aka *vutta* 2.20ff

foot

a division of a line of poetry, usually consisting of 3 syllables, see also *gaṇa*

gaṇa, a bar or section

- 1) in *gaṇacchandās* metre this refers to a bar normally consisting of 4 *mattā*, derived from musical structure. These accurately reflect the structure of the metres. There are five such *gaṇas*, which are given here with their Sanskrit and Greek names.

<i>jagaṇa</i>	◡—◡	<i>amphibrachys</i>
<i>bhagaṇa</i>	—◡◡	<i>dactylus</i>
<i>sagaṇa</i>	◡◡—	<i>anapaest</i>
<i>magaṇa</i>	——	<i>spondee</i>
<i>nagaṇa</i>	◡◡◡◡	<i>proceleusmaticus</i>

- 2) a division consisting of 3 syllables which are a kind of shorthand used to describe the *akkharacchandās* metres. There are 8 such *gaṇas* which are used in classical Indian theory:

<i>jaṇa</i>	◡—◡	<i>amphibrachys</i>
<i>bhaṇa</i>	—◡◡	<i>dactylus</i>
<i>saṇa</i>	◡◡—	<i>anapaest</i>
<i>yaṇa</i>	◡—	<i>bacchius</i>
<i>raṇa</i>	—◡—	<i>cretius, amphimacer</i>
<i>taṇa</i>	—◡◡	<i>palimbacchius</i>
<i>maṇa</i>	— — —	<i>molossus</i>
<i>naṇa</i>	◡◡◡	<i>tribrachys</i>

in the descriptions that occur in the Indian prosodies these are normally indicated as *ja*, *bha*, *sa*, etc.

la(hu) ◡ and *ga(ru)* — are used to describe the end syllable(s),

sometimes *la la* (i.e. ◡◡) is seen written as *lā*; and *ga ga* (— —) as *gā*.

(note: ◡ — = *iambus*; — ◡ = *trochee*; — — = *spondee*; ◡◡ = *pyrrhic*)

(cf. *maṇa* & *naṇa* as they are used differently in the two systems, and have different names in Greek)

Although these signs can be used to describe the alternation of long and shorts quite accurately, they often disguise the underlying structure of the metres, so that e.g. *Indavajirā* is described as being *ta ta ja ga ga*, which when written out gives the pattern:

— ◡ — | — ◡ ◡ | ◡ ◡ — | — — ,

this gives the impression that there are rhythmic patterns in the metre which do not, in fact, appear. The structure is better defined like this:

— ◡ — | — ◡ ◡ | — ◡ — —

which better reflects the rhythm.

gaṇacchandās

name of a class of metres built around the first of the *gaṇa* principles outlined above, there are about 450 *gaṇacchandās* verses in the canon, see 2.15ff

garu

literally *heavy*, a syllable considered to be long metrically, see 1.1ff

gāthā

variously translated as verse, stanza, or strophe. A *gāthā* normally consists of 4 lines, sometimes 6, though occasionally we come across a verse which is defective in this regard

geyya

literally *singable*, in the tradition signifies a type of composition of mixed prose and verse, some of which at least may have been ‘performed’ to illustrate points of Buddhist doctrine or folklore. *Sagāthavagga of Saṃyutta-nikāya* contains many examples of *geyya*

Gīti

literally *song* 2.17ff cf also Old *Gīti* 2.16

***Gubbini* (*Gurvinī*)**

a *gaṇacchandās* hypermetre see 2.19

half-verse (or half-stanza etc.) see *pādayuga*

haplography

omission of a syllable by accident when it appears twice in a word

hiatus

- 1) a gap
- 2) sometimes used to refer to two vowels in succession without an intervening consonant

hypermetre

- 1) a class of metres composed using extendable forms, see 2.19
- 2) having a syllable, or syllables additional to the normal metre (even a line showing syllabic resolution may be referred to as hypermetric)

ictus

in metre a syllable that is stressed or emphasized (ictus strictly speaking does not apply to Pāli verse composition, but it is sometimes mentioned in the literature).

Jagatī

- 1) a syllabic metre 2.6ff
- 2) sometimes used as a generic name for any metre having 12 syllables to the line

Jāti

- 1) another name for the measure metres
- 2) another name for *Upajāti*

junction, see *sandhi*

kabba (*kāvya*), literature

lahu (*laghu*)

literally *light*, a syllable considered to be short metrically see 1.1ff

Māgadhi (aka *Māgadhi*)

another name for Vetāliya (2.10), presumably because *Magadhi* is where the metre originated

mattā (*mātrā*)

literally a *measure*, short syllables are counted as one *mattā*, long ones as two

mattāchandas (*mātrācchandas*), measure metre 2.9ff

there are about 400 verses in *mattāchandas* metre in the canon

measure metre, see *mattāchandas* above

metathesis

exchange of syllabic position e.g. *kariyā* > *kayirā*

metrical licence, see 1.8ff

metri causa, the metre is the cause (of a change in word form)

mora = *mattā* = a measure

musical metres

refers to the *mattāchandas* and *gaṇacchandas* metres which have been derived under the influence of musical structures

new metres

refers to the *mattāchandas*, *gaṇacchandās*, and fixed *akkharacchandās* metres

niggahīta

the pure nasal sound. Only occurs normally after a short vowel (i.e. as *aṃ*, *iṃ*, & *uṃ*), but then makes that syllable long metrically, sometimes also referred to as *anusvara*, see 1.1 & 1.11

odd line = prior line = the first line in a *pādayuga*

Old Gīti (aka Old Āryā)

the earliest form of *gaṇacchandās* metre 2.16

Opacchandāsaka (*Aupacchandāsaka*) 2.10**opening**

the beginning section of a line, may be followed by a break and cadence as in *Tuṭṭhubha* and related metres, or simply by a cadence as in *Vatta* and the *mattāchandas* metres

open syllable, see 1.1

pāda

a line of verse

pādādigaru

a short syllable that is counted as long because it stands at the beginning of a line (this is sometimes seen in early *gaṇacchandās* verses)

pādantagaru

a short syllable that is counted as long because it stands at the end of a line, see 2.9

pādayuga

- 1) a pair of lines
- 2) sometimes loosely used to refer to a line in *gaṇacchandās* verse

pajja (*padya*)

verse (as opposed to *gajja*, prose)

Pamitakkharā (*Pramitākṣarā*) 2.21

Panti, generic name for metres having 10 syllables to the line

partial vowels, see *sarabhatti*

pathyā

the normal structure of a line (as opposed to *vipulā*, variation), see 2.3

pause, *cheda* (see also *yati*)

position

for syllables not making position see 1.5

posterior pāda = even line = the second line in a *pādayuga*

prior pāda = odd line = the first line in a *pādayuga*

Pupphitagā (*Puṣṣitāgrā*) 2.12

rassa

a naturally short vowel, not to be confused with *lahu*, which refers to metrical length

Rathoddhatā 2.12

recitor's remarks 1.13

redundant syllable

a syllable extra to the metre

replacement, see 1.14ff

resolution, see 1.14ff

Rucirā 2.8

rule of resolution, 1.15; 2.4; 2.15

samavutta (*samavṛtta*)

a metre having the same line repeated (normally four times) to make up a verse e.g. *Tuṭṭhubha*, *Rucirā*, *Pamitakkharā*, see also 2.20ff

samprasāna, reduction

a phonetic change whereby a semi-vowel is reduced to its vowel equivalent
e.g. *ya* > *ī*; *va* > *ū*

sandhi

refers to the junction between words, and the euphonic changes that take place accordingly

sara (*svara*), vowel; (*vyañjana*, consonant)

sarabhatti (*svarabhakti*)

literally a *broken vowel*, an anaptyctic vowel, see 1.6

scansion

metrical analysis, see 1.1ff

Siloka (*Śloka*)

another name for Vatta, for which see 2.3ff

stanza, see *gāthā*

strophe, see *gāthā*

Svāgatā 2. 14

syllable

can be defined as a word, or a part of a word, which can be uttered with a single effort of the voice

syllabic metres, *akṣharacchandas* type see 1, 2.1ff

syncopation

a change in the order of syllables, which produces a different rhythm e.g.
— — — — > — — — — see 2.10

Ti & iti

quotation marker 1.13

Tuṭṭhubha (*Triuṭubh*) 2.6ff

also sometimes used as a generic name for any metre having 11 syllables to the line

Uggatā (*Udgatā*) 2.23

Uggīti (*Udgīti*) 2.17

Upagīti 2.17

Upajāti 2.8
sometimes loosely referred to as *Tuṭṭhubha*

Upaṭṭhitā 2.21

Upaṭṭhitappacupita (*Upasthitapracupita*) 2.23

Vaṃsaṭṭhā (*Vaṃśasthā*) 2.8
sometimes loosely referred to as *Jagatī*

vaṇṇaka
a descriptive compound having an extendable metrical structure, see 2.19

Vatta (*Vaktra*) 2.3ff

Veḍha 2.19

Vegavatī 2.13

Vetālīya (*Vaitālīya*) 2.10

vipulā, variation (as opposed to *pathyā*, normal) 2.4

visamavutta (*visamavṛtta*)
a verse with 4 dissimilar lines 2.23ff

vutta (*vṛtta*)
a fixed syllabic metre, *akkharacchandasa* type 2

vutti
the “length”, or weight, of a syllable

yati, caesura
a word break (not a pause as sometimes stated). Occasionally the word break is hidden or concealed (*avyakata*) in a compound

GUIDE TO FURTHER STUDY (with abbreviations, and method of quoting)

The following books and articles contain further information on the *gāthās* and metres of the Pāli canon (all volumes are as published by PTS, unless otherwise stated):

TEXTS:

DN: *Dīghanikāya* - each volume has a *gāthā* index (quoted by *sutta* name, number, *bhāṇavāra* (where appropriate), and paragraph number)

MN: *Majjhimanikāya* - volume 3 contains a very incomplete *gāthā* index (quoted by *sutta* name, number, *bhāṇavāra* (where appropriate), and paragraph number)

SN: *Samyuttanikāya* - each volume has a *gāthā* index, and the index volume (no 6) collates these (quoted by *Samyutta* name, and *sutta* number)

AN: *Aṅguttaranikāya* - each volume has a *gāthā* index, and the index volume (no 6) collates these (quoted by *nipāta* number, and *sutta* number)

Khp: *Khuddakapāṭha* - has a *gāthā* index and an analysis of the metres (quoted by *sutta* name and verse number)

Dhp: *Dhammapada* - index volume contains a *pāda* index (quoted by verse number)

Ud: *Udāna* - includes *udāna* index (quoted by *vagga* & *sutta* number)

It: *Itivuttaka* - includes *gāthā* index (quoted by *vagga* & *sutta* number)

Sn: *Suttanipāta* - the *gāthā* index and metre analysis are contained in Vol 3 of the commentary *Paramatthajotikā*, (quoted by *sutta* name, *vagga* and *sutta* number, and/or verse number)

Vv: *Vimānavatthu* - (quoted by *Vimāna* name and line number)

Pv: *Petavatthu* - (quoted by *Peta* name and line number)

Th: *Theragāthā* - 2nd edition (1966) contains ALSDORF's reconstruction of the *gaṇacchandās* metres in Appendix 2 (quoted by *Thera* name and verse number)

Thī: *Therīgāthā* - as above (quoted by *Therī* name and verse number)

Ja: *Jātaka* - (quoted by *Jātaka* name and verse number)

KJa: *Kuṇāla-jātaka* - contains metre analysis, including a commentary on the lines in *Veḍha* metre

Ap: *Apadāna* - Buddha Jayanti edition (quoted by verse number)

Bv: *Buddhavaṃsa* - (quoted by book and line number)

Cp: *Cariyapīṭaka* - (quoted by book and line number)

TRANSLATIONS, STUDIES ETC.

ALSDORF L.: *Die Āryā-Strophen des Pāli Kanon*, Mainz 1967

BECHERT H.: "Alte *Veḍhas*" im *Pāli-Kanon*, Gottingberg 1988

BECHERT H.: "A Metric '*Varṇaka*' in the Pāli Scriptures", in *Studies in Buddhism and Culture*, Tokyo 1991

BOLLEE W.B.: *Reverse Index of Dhammapada, Sutta Nipāta, Theragāthā, and Therīgāthā, with Parallels from the Ārāraṅga, Sūyagaḍa, Uttarajjhāya, Dasaveyāliya and Isibhāsiyāim*, Reinbeck 1980

FRANKE R.O.: "Die *Gāthās* des *Dīghanikāya* mit ihren Parallelen", JPTS 1909, contains parallel passages to the *Dīgha* verses, including *Lakkaṇasut-tanta*

FRANKE R.O.: "Konkordanz der *Gāthās* des *Majjhimanikāya*", in *Kleine Schriften* vol 2, Wiesbaden 1978

HARE E. M.: *Woven Cadences of Early Buddhists* (trans of Sn), contains a complete concordance to the *pādas* of Sn

LIENHARD S.: “Sur la Structure Poétique des Thera-Therīgāthā”, JAs 1975

MOORE J.H.: “Metrical Analysis of the Pāli *Itivuttaka*”, JAOS 28 1907

NORMAN K.R.: *Elders Verses I* (trans of Th), contains a list of the metres and metrical analysis in the Introduction, and a running commentary on the metres of the verses (*EV I*)

NORMAN K.R.: *Elders Verses II* (trans of Thī), contains a list of the metres and metrical analysis in the Introduction, and a running commentary on the metres of the verses (*EV II*)

NORMAN K.R.: *The Group of Discourses II* (trans of Sn), contains a running commentary on the metres of the verses (*GD II*)

NORMAN K.R.: *Word of the Doctrine* (trans of Dhp), contains metrical analyses in the Introduction, and a running commentary on the metres of the verses (*WD*)

NORMAN K.R.: *Collected Papers*, Vol 3, 4, & 5 contain reconstructions of 3 metres found in *Lakkhaṇasuttanta*. Vol 4, & 5 also have articles on *gaṇacchandās* metres (*CP*)

SAKAMOTO-GOTO J.: *Les Stances en Mātrāchandās dans le Jātaka*, Paris 1982

SIMON R.: “Der Śloka im Pāli”, ZDMG 1890

SMITH H.: “Conspectus terminorum (metricorum)”, in *Saddanīti*, Vol IV, Lund 1966

SMITH H.: “Epilegomena” in *Critical Pali-English Dictionary* Vol 1, Copenhagen 1947

STEDE W.: “The Pādas of Thera- and Therī- gāthā”, JPTS 1924-7

WARDER A.K.: *Introduction to Pāli*, chapter 30 contains an all-too-brief outline of Pāli metre (*Intro*)

WARDER A.K.: *Pāli Metre*, the most comprehensive book on the subject studying the development of Pāli metre against its historical background, contains many useful tables on usage (*PM*)

OTHER ABBREVIATIONS OCCURING IN THE LITERATURE

AMg: *Ardhamāgadhī*, the language of the Jaina Canon

Apa: Apabhraṃśa, a late Prākṛit language

Be: Text in Burmese characters, usually refers to the relevant Chaṭṭha Saṅgāyana text

BHS: Buddhist Hybrid Sanskrit

Ce: Text in Sinhalese characters, usually refers to the relevant Buddha Jayanti Tripitaka text

Ee: Text in Roman characters, usually refers to the relevant PTS edition; or to the Harvard Oriental Series

m.c.: *metri causa*, the metre is the cause (of a change in word form)

MIA: Middle Indo-Āryan = Pāli & Prākṛit

OIA: Old Indo-Āryan = Vedic & Classical Sanskrit

Pkt: Prākṛit

Se: Text in Thai characters, usually refers to the relevant Royal Thai edition of the text

Skt: Sanskrit

v.l.: variant reading (in the manuscripts)

v.r.: variant reading (in the commentaries, grammarians, etc.)